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(54) Title: PROCESS FOR THE PREPARATION OF LOW MOLECULAR WEIGHT HYDROGENATED NITRILE RUBBER

(57) Abstract: Hydrogenated nitrile rubber polymers, having lower molecular weights and narrower molecular weight distributions than those known in the prior art, are prepared by a process carried out in the presence of hydrogen and optionally at least one co-olefin. According to the process, the substrate is simultaneously subjected to a metathesis reaction and a hydrogenation reaction. The reactions take place in the presence of a ruthenium or osmium alkylidene based catalyst. The hydrogenated nitrile rubber produced has a molecular weight (Mw) in the range of from 20,000 to 250,000, a Mooney viscosity (ML 1+4 at 100 deg. C) in the range of from 1 to 50, and a MWD of less than 2.6. The hydrogenated nitrile rubber obtained is used in the automotive, electrical, mechanical engineering and shipbuilding industries.

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